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Commissioner of Patents and Trademarks
Washington, D.C. 20231

Attention: Mr. Michael Koczo Jr.

Reference # 09/173,828 ✓

Dear Mr. Koczo

Thank you for the kind attention and consideration that you have expressed to me throughout our communications.

In response to your office communication dated July 7, 2003

I submit the following:

- A. Crossed reference explanation of new claims.
- B. New claims numbered 42 through 62.
- C. No new matter statement.
- D. Certificate of mailing statement.

In an effort to better elucidate the essence of the claims and comply with the requested clarity, definiteness, and method, as well as establish a more sequential and logical order to related claims and in order to avoid the morass of additions and deletions that would render the document practically undecipherable because the changes would be much too extensive.

Therefore, I have decided to cancel all of the previous claims. Please cancel claims 1 through 41. The new claims total 20 and are numbered 42 through 62 consecutively; pages 1 through 12.

I also take this opportunity to clarify and define certain terms that I have had to originate in order to describe some of the innovative features of my invention.

In my first claim #42 A Rotary Piston Continuous Flow Positive and Dynamic Displacement Expansible Chamber Device; this title may explain the nature of the invention. The terms that need interpretation such as: Dynamic Displacement is merely the hybrid combination of two terms that as you know are used regularly in the field of internal combustion engines. These terms are positive displacement and the dynamic effect. The fact that the valve goes into a fluidic amplifier mode, whereas, it does not completely close all the way at higher revolutions (RPM) thus saving time, motion, momentum, inertia, and wear yet still completing its task of isolating the fluid by amplifying fluid flow and direction, thereby, being a form of the dynamic effect; thus complementing positive displacement at lower revolutions and according to the need. This need is automatically determined by the speed or rate of revolutions and fluid flow. In its simplest manifestation independent claim #42 said valve is free and acts this way naturally without controls. In some of its subsequent dependent claims where the valve is externally controlled, this natural function is interrupted and must then be provided for either mechanically or electrically in the form of cams and governors (figs.31 through 37) that also limit wear (claims 44 and 45). In yet other dependent claims simple rollers are added to the underside of the valves to limit wear (claims 48, 50 and 51, fig. #4 and 5 reference numeral 67).

The above is also true for the independent claim # 52 in its embodiment as an internal combustion engine and its subsequent dependent claims that relate to this subject.

In claim #46 (figures 8 and 8A) I refer to a version of the invention in which the isolating valve is reversed horizontally from its usual position, relative to the rotation of the rotor and pistons. In other words in the inventions regular configuration the pistons first pass the area of the valve's pivoting shaft first, then the sliding flapping area. In this manifestation (claim #46) it's the sliding flapping area of this valve that first encounters the sloped back of the pistons then the valve passes the pivoting shaft area, in effect creating something like a ramp for the evacuating fluids.

My second independent claim #52 also describes the gist of the invention entitled A Continuous Internal Combustion Positive and Dynamic Displacement Passive Compression Compound Cycle Rotary Engine. Some of the terminology in this title also begs explanation as follows:

Passive compression: refers to the fact that compression is actually achieved in the following passive manner by the process of

combustion itself through the use of precombustion chambers (claims #56 and #57) described as an inner stratified flashover reaction cage, thus named by me because of its space saving concentric design but a precombustion chamber none the less (Figs. 3,4,5,7,9,10-15, 17 etc., reference numeral 65) and passage reductions such as in the combustor to accumulator to top seal point area, diffusers (Fig. 4, 5, reference numeral 62 and 74) and the isolating valve itself; all act like nozzles increasing pressure and compression to which additional air is also added (Fig. 3, reference numeral 66) in order to lean out the mixture and improve combustion and the exhaust.

Compound cycle: this refers to the fact that the four cycles usually associated with an internal combustion engine: intake, compression, power, and exhaust occur simultaneously.

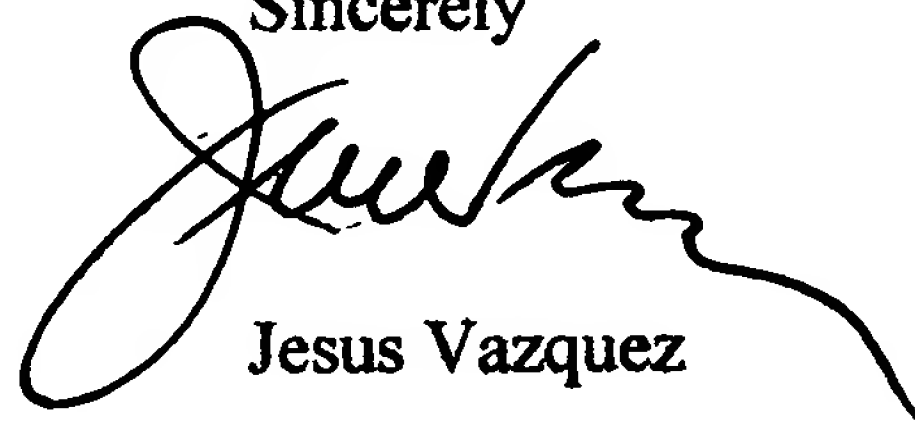
The dependent claims #54 and 55 merely add an air canister (Fig. 4 reference numeral 69) also known as a reserve air tank which supplies starting air for the fuel eliminating the need for a starter. This tank or canister replenishes its air supply as needed by means a small electric pump.

Thanks for your diligence and consideration. As per your suggestion I was able to obtain the help of a noble, knowledgeable, and generous gentleman that is a retired patent attorney.

I hereby declare that no new material has been added to these claims or to the specifications, that all the materials and information are reflected in the original paperwork submitted and that my intention with these changes is to elucidate and further explain the workings and construction of my invention.

I have also enclosed a signed and dated certificate of mailing. At this point I wish to thank you again for your kind, enlightening cooperation and assistance, for which I remain,

Sincerely

A handwritten signature in black ink, appearing to read 'Jesus Vazquez', with a long, sweeping horizontal line extending to the right.

Jesus Vazquez



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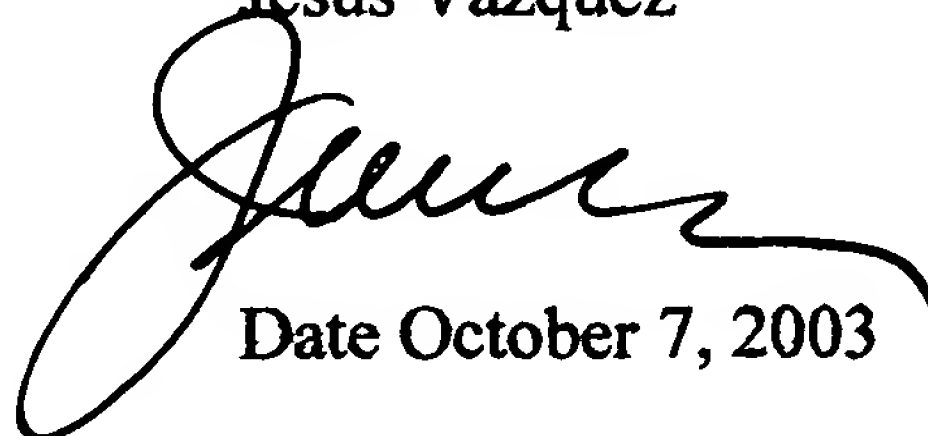
Reference # 09/173,828

Dear Sirs

I hereby certify that this correspondence is being deposited with
the United States Postal Service with sufficient postage as first class mail
in and envelope addressed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

Jesus Vazquez



Date October 7, 2003